

Association, have examined (so many lbs. of beef, mutton, etc.), belonging to of , and deposited at , and are of opinion that the same is unsound, unwholesome, and unfit for the food of men."

(Here follow three signatures.)

It will be seen that this system is an entirely different one from that in operation in a few towns where, in certain cases in which there has been apparently no attempt to "run the gauntlet" with unsound meat, but in which the opinion of the meat inspector is asked as to the fitness of the meat, a request is made that, if unsound, it may be *informally* seized and no proceedings taken. Here a "jury" of butchers is sometimes called upon to give their opinion and put it in writing, in order to safeguard the inspector in the event of the owner of the meat subsequently turning round and claiming damages for this informal seizure (*vide* recent case at Rochdale which appears from reports to have been of this nature).

In conclusion, I would simply say that the adoption of such a system as that described is not the proper way to prevent the sale of unsound meat, being neither dignified, legal, nor likely to work without conflict of opinions.

The provision of a public abattoir, to be in the hands of the local authority under the constant supervision of a practical and intelligent butcher, and under the constant inspection of a qualified meat inspector, and the abolition of all private slaughter houses, should be the first step towards this in all towns, large or small.

There should be no need at all for a Butchers' Vigilance Committee or a Butchers' Jury in any well regulated district.

#### EXPERIMENTS AS TO THE DISINFECTING POWERS OF FORMIC ALDEHYDE, AS EVOLVED FROM AN ALFORMANT LAMP, COMPARED WITH SULPHUR DIOXIDE.

BY

A. WYNTER BLYTH (M.O.H. St. Marylebone.)

In the March Report, 1897, there will be found some rather elaborate experiments as to the disinfecting powers of formic aldehyde.\* Excellent results were obtained from the evolution of a large quantity of the gas in a small room from an autoclave. The Sanitary Committee, however, objected to the weight of the apparatus and to its expense, hence that particular form of appliance was not adopted.

The Alformant lamp is light, portable, and cheap. Paraform tablets are placed in a little brass cup, supported over a lamp, charged with methyl alcohol. On lighting the lamp, the paraform tablets are converted mainly into formic aldehyde gas.

Various experiments have been published showing, apparently, its efficacy. The writer was, therefore, strongly prejudiced in its favour, and trusted that this was a simple means of fumigation by formic aldehyde. It, therefore, appeared desirable to make an independent investigation.

A culture of the diphtheria bacillus was prepared by Mr. Meredith Blyth, B.Sc. Lond., in broth, in a well-known bacteriological laboratory. A number of squares of flannel were sterilised by boiling, then drying. Each square was saturated with the diphtheria culture, placed under a shade over calcium chloride until thoroughly dry (60 hours). The two top rooms of the shelter, each about 800 cubic feet capacity, in which the former experiments had been conducted, were again used. Some of the squares of flannel were placed in glass test-tubes plugged with cotton wool, each test tube having five to six large holes blown out (by a blow-pipe) in the walls. Other pieces of infected flannel were hung on the walls by tacks.

In the one room, two cylinders of sulphur dioxide were discharged. In the other room, the Alformant lamp, charged with pure methyl alcohol and 15 tablets of paraform (double the number recommended by the inventors), and the lamp lit. The rooms were now both sealed in the usual way and allowed to remain for twenty-four hours. On opening the aldehyde room the lamp was found to be still burning, but the whole of the tablets had evaporated; there was but a faint odour of the gas. The sulphur room, on the contrary, smelled strongly of sulphur dioxide.

The several pieces of flannel were handed to Mr. Meredith Blyth, who carefully cultivated them in the Bacteriological Laboratory before alluded to, with the following results:—

A + sign signifies growth, a minus — sign, no growth.	
FORMALDEHYDE:	SULPHUR DIOXIDE:
1. Tube in fireplace, wrapped in blanket	1. Tube in left-hand bed, wrapped in blanket —
2. Tube on floor, wrapped in rug	2. Tube in bed (right-hand), wrapped in blanket +
3. Tube at top of window, wrapped in paper	3. Tube on mantle-piece, in blanket —
NOT ENCLOSED IN TUBES.	
4. One foot from ceiling	4. One foot from ceiling —
5. One foot from floor Controls	4. One foot from floor —
	(3) A tube (not covered) on table, close to gas cylinders +

The results are, therefore, that the sulphur disinfects four out of six, the aldehyde only one out of five.

Since there can be no manner of doubt that excess of formic aldehyde gas is superior to sulphur, the failure of the lamp appears to be due to the insufficient quantity of tablets it holds. If the lamp is modified, so as to contain a much larger

\* See PUBLIC HEALTH, ix., 299 (June 1897).

quantity of paraform, different results might have been obtained.

As the case stands, formic aldehyde, evolved by the present form of lamp, cannot be recommended.—*Marylebone Chronicles*.

## THE CONTROL OF MEASLES.

BY

A. NEWSHOLME, M.D. (M.O.H. Brighton).

MEASLES caused 17 deaths during 1897, of which 2 occurred in January, and 15 in December. The annual death-rate from this disease was 14 per 100,000 of the population as compared with 45 in 1896. Cases of measles are not compulsorily notified under the Infectious Disease Notification Act, the Town Council not having added this disease to the schedule of diseases mentioned in the Act. In the absence of such compulsory notification, we are dependent for information on the voluntary co-operation of district and dispensary medical officers, relieving officers, and more particularly of the teachers in elementary schools. An arrangement has recently been made with the School Board and the managers of elementary schools, which it is hoped will make the information from this source more complete and more prompt. In virtue of this arrangement the Education Department will allow in the average attendance of a given school for absentees, whose absence from school is certified by me as having been caused by infectious illness, either personal to the scholar or occurring in the same household. I have intimated to the teachers that such certificates will only date from the day on which the intimation of the case is received by me. It is thus to the advantage of the school, as well as of the town, that the information should be sent to me promptly. The following form has been printed by the School Board for this purpose:—

It is hoped that the information thus received will enable us to exercise a considerable check upon the spread of Measles, with the minimum amount of interference with school-work.

The work in connection with this branch of the sanitary organization of the town is rapidly becoming more extensive and more complex. This must necessarily be so, unless we are to accept the position that the spread of disease by means of school attendance is inevitable and uncontrollable. The dense aggregation of children in schools undoubtedly furnishes favourable opportunities for the spread of disease, and this can only be kept under control by the active and persistent co-operation of teachers with my department. Even with this co-operation, our efforts are occasionally rendered futile by the non-co-operation of parents, who send their children to school within four or five days after the rash of measles has disappeared, or while in the initial stage of the disease, or hide the fact that another child than the one attending school has measles. It is seldom that ignorance can be truthfully pleaded, except as regards the preliminary catarrh of measles, as the rash of measles is so well known. Over 30,000 copies of the following circular have been distributed:—

Health Department,  
Town Hall, Brighton.

### PRECAUTION AGAINST THE SPREAD OF INFECTION.

Measles is infectious for three weeks from the date of commencement of the first symptoms. During this period the child must be kept isolated in a separate room.

No healthy child from a house where measles is prevalent should be allowed to attend day or Sunday School during the three weeks named above; and if a second case of measles occurs, three weeks must be allowed to elapse from the beginning of this case before any child from the same house is allowed to attend school.

It is highly dangerous for parents to visit among their neighbours while their children are suffering from measles or any other infectious disease; or to allow children suffering from such disease to play with other children in the street or elsewhere, or to attend school.

## SCHOOL BOARD FOR BRIGHTON AND PRESTON U.D.

### FORM FOR NOTIFICATION OF INFECTIOUS DISEASES TO MEDICAL OFFICER.

Name of Scholars.	Date of last Attendance at School.	Date when reported to M.O.H.	Date when Scholar may return to School.* (This Column to be filled in by M.O.H.)	Supposed Nature of Illness.	Inclusive dates within which Scholar was absent from School on account of notice of Sanitary Authority. (This column to be filled in by M.O.H.)

\* This date is subject to no other case of Infectious Disease arising in the house.

Signature of Medical Officer of Health.

Name of School \_\_\_\_\_

Department \_\_\_\_\_

Teacher's Signature \_\_\_\_\_